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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,188	11/01/2005	Harald Ligtenberg	27044U	2220
20529	7590	04/29/2008		
NATH & ASSOCIATES 112 South West Street Alexandria, VA 22314			EXAMINER YAGER, JAMES C	
			ART UNIT 4145	PAPER NUMBER
			MAIL DATE 04/29/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/553,188	<b>Applicant(s)</b> LIGTENBERG ET AL.	
	<b>Examiner</b> JAMES YAGER	<b>Art Unit</b> 4145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20051013 &amp; 20070703 &amp; 20080110</u> .                  | 6) <input type="checkbox"/> Other: ____.                          |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. Regarding the information disclosure statement filed 7/3/07, all of the references cited on page 1 of 2 were previously considered because they were cited either on the information disclosure statement filed on 10/13/05 or on page 2 of 2 of the disclosure statement filed 7/3/07. The references crossed out on page 2 of 2 of the disclosure statement filed 7/3/07 were previously considered because they were cited on the information disclosure statement filed on 10/13/05.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 6 and 14-16 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 6, 14 and 16, the phrase "or the like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

Regarding claim 15, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2, 6-10, 12, 14 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Baldwin-Ehret-Hill Inc. (GB 1214330).

Regarding claims, 1, 2, 6 and 7, Baldwin-Ehret-Hill Inc. discloses a process for producing pipe sleeves (P1/L10-15, laminated pipe covering) made of mineral wool (P3/L35-40) for insulating pipelines or for reducing the sound level in pipeline systems, comprising the following steps: a) providing a nonwoven web made of mineral wool which is provided with an uncured binder (P3/L80-85), b) winding up the nonwoven web on a winding mandrel of a winder (P3/L30-35), c) curing the binder (P4/L15-20), characterized in that at least one reinforcing layer is provided before the nonwoven web runs into the winder, in such a way that during the winding the said reinforcing layer becomes a constituent part of the pipe sleeve produced as a result (P3/L35-40, P3/L55-60), characterized in that the at least one reinforcing layer is applied to the nonwoven web in such a way that it is wound up with it and, following winding, is present within the pipe sleeve (P3/L30-40), characterized in that the reinforcing layer is a glass nonwoven, a woven glass fibre fabric, in particular made of E-glass or the like (P3/L35-40, nonwoven glass fiber), characterized in that the reinforcing layer is wetted with additional binder before being provided for the winding operation (P3/L80-85).

Regarding claim 8, Baldwin-Ehret-Hill Inc. discloses a pipe sleeve (P3/L35-45) made of mineral wool for insulating pipelines or for reducing the sound level in pipeline systems, the pipe sleeve being formed of a wound nonwoven web with cured binder produced by means of a process according to claim 1 (P3/L30-40, P3/L80-85).

Regarding claims 9, 10, 12, 14 and 18 Baldwin-Ehret-Hill Inc. discloses a pipe sleeve (P3/L20-30) made of mineral wool for insulating pipelines, the pipe sleeve being formed of a wound nonwoven web with cured binder, characterized in that there is at least one reinforcing layer on the inner side of the pipe and/or enclosed at at least part of the boundary between successive wound layers (P3/L20-40, P3/L75-85, Fig. 2), characterized in that the reinforcing layer is enclosed within the wound layers (Fig. 2), characterized in that a reinforcing layer in the form of a trickle guard is wound circumferentially around it (P3/L35-40, Fig. 2), characterized in that the reinforcing layer is a glass nonwoven, a woven glass fibre fabric or the like (P3/L35-40, nonwoven glass fiber), characterized in that the reinforcing layer is provided with means for allowing separation of wound layers in order to reduce external or internal diameter of the pipe (P3/L40-45, slit).

6. Claim 13 is rejected under 35 U.S.C. 102(b) as being anticipated by Lauren (US 4,576,206).

Regarding claim 13, Lauren discloses a pipe sleeve made of mineral wool (C1/L15-25), characterized in that it has at least one reinforcing layer (C2/L33-36) which provides the inner surface of the pipe sleeve that determines the clear internal diameter of the pipe sleeve (Fig. 1).

The recitation that the pipe sleeve is for sound-level reduction in pipeline systems, in particular of heating installations or ventilation systems, does not confer patentability to the claim since the recitation of an intended use does not impart patentability to otherwise old compounds or compositions. *In re Tuominen*, 671 F.2d 1359, 213 USPQ 89 (CCPA 1982).

7. Claims 9, 15 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Blau et al. (US 3,346,016).

Regarding claims 9, 15 and 16, Blau discloses a pipe sleeve (C2/L19-25) made of mineral wool (C4/L15-16) for insulating pipelines, the pipe sleeve being formed of a wound nonwoven web with cured binder (C4/L10-25, C5/L60-65), characterized in that there is at least one reinforcing layer (C5/L64-66, aluminum foil) enclosed at at least part of the boundary between successive wound layers (C5/L55-70), characterized in that the reinforcing layer contains particulate material (C4/L30-35), characterized in that the reinforcing layer includes a foil material (C4/L70-75).

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

Art Unit: 4145

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baldwin-Ehret-Hill Inc. (GB 1214330), as applied to claim 1 above, in view of Hofman (US 3,824,140).

Regarding claim 5, Baldwin-Ehret-Hill Inc. discloses all of the claim limitations as set forth above. Baldwin-Ehret-Hill Inc. does not disclose that the reinforcing layer is applied to the mandrel before the winding of the nonwoven web in such a way that it provides the inner surface of the pipe sleeve determining the clear internal diameter of the pipe sleeve. Hofmann discloses a process for producing pipe sleeves for insulating pipelines comprising a) providing a nonwoven web (C2/L40-45) b) winding up the nonwoven web on a winding mandrel of a winder (C3/L40-50), characterized in that at least one reinforcing layer is provided (C1/L45-50, metal foil layer) before the nonwoven

web runs into the winder, in such a way that during the winding the said reinforcing layer becomes a constituent part of the pipe sleeve produced as a result (Fig. 3). Hofmann further discloses that the reinforcing layer is applied to the mandrel before the winding of the nonwoven web in such a way that it provides the inner surface of the pipe sleeve determining the clear internal diameter of the pipe sleeve (Fig. 3).

Baldwin-Ehret-Hill Inc. and Hofmann are analogous art because they both teach about processes of producing pipe sleeves comprising winding up nonwoven webs and reinforcing layers on a winding mandrel of a winder. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the reinforcing layer to the mandrel before the winding of the nonwoven web in such a way that it provides the inner surface of the pipe sleeve determining the clear internal diameter of the pipe sleeve as described by Hofmann in the process of Baldwin-Ehret-Hill Inc. Doing so would amount to nothing more than a use of a known method step for its intended use in a known environment to accomplish entirely expected result.

12. Claims 3 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baldwin-Ehret-Hill Inc. (GB 1214330), as applied to claims 1, 2 and 9 above, in view of Roth (US 5,056,564).

Regarding claim 3, Baldwin-Ehret-Hill Inc. discloses all of the claim limitations as set forth above. Baldwin-Ehret-Hill Inc. discloses that the reinforcing layer is placed on the nonwoven web and are then wound up together with the latter (P3/L35-40, P3/L55-60). Baldwin-Ehret-Hill Inc. does not disclose that the reinforcing layer comprises a plurality of separate strips. Roth discloses a process for producing pipe sleeves



(C1/L10-15) comprising a) providing a nonwoven web made of mineral wool (C1/L15-16) b) winding up the nonwoven web on a winding mandrel of a winder, characterized in that at least one reinforcing layer is provided before the nonwoven web runs into the winder, in such a way that during the winding the said reinforcing layer becomes a constituent part of the pipe sleeve produced as a result (C1/L15-20). Roth discloses that the reinforcing layer comprises a plurality of separate strips (C2/L40-52, bracing strips). Roth further discloses that providing the reinforcing layer in strips provides helps the sleeve to conform to the surface of the pipe (C2/L40-60).

Baldwin-Ehret-Hill Inc. and Roth are analogous art because they both teach about processes of producing pipe sleeves comprising winding up nonwoven webs and reinforcing layers on a winding mandrel of a winder. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the reinforcing layer in the form of strips as taught by Roth in the process of Baldwin-Ehret-Hill Inc. to provide a process of making a pipe sleeve wherein the sleeve more easily conforms to the shape of the pipe.

Regarding claim 11, Baldwin-Ehret-Hill Inc. discloses all of the claim limitations as set forth above. Baldwin-Ehret-Hill Inc. discloses that the reinforcing layer comprises a plurality of separate strips. Roth discloses a pipe sleeve (Fig. 3) made of mineral wool (C2/L40-45) with at least one reinforcing layer (C2/L49-52, bracing strips). Roth further discloses that providing the reinforcing layer in strips helps the sleeve to conform to the surface of the pipe (C2/L40-60).

Baldwin-Ehret-Hill Inc. and Roth are analogous art because they both teach about pipe sleeves made of mineral wool comprising nonwoven webs and reinforcing layers. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the reinforcing layer in the form of strips as taught by Roth in the pipe sleeve of Baldwin-Ehret-Hill Inc. to provide a pipe sleeve wherein that more easily conforms to the shape of the pipe.

13. Claims 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baldwin-Ehret-Hill Inc. (GB 1214330), as applied to claim 1 above, in view of Blau et al. (US 3,346,016).

Regarding claim 4, Baldwin-Ehret-Hill Inc. discloses all of the claim limitations as set forth above. Baldwin-Ehret-Hill Inc. further discloses that the reinforcing layer comes to lie on the outside of the pipe sleeve with the effect of a lamination, as the last layer arranged around the full circumference (Fig. 2). Baldwin-Ehret-Hill Inc. does not disclose that the reinforcing layer is added to the trailing end of the nonwoven web. Blau et al. discloses a process for producing pipe sleeves (C5/L55-60) comprising a) providing a nonwoven web made of mineral wool (C4/L15-20) b) winding up the nonwoven web on a winding mandrel of a winder, characterized in that at least one reinforcing layer is provided before the nonwoven web runs into the winder, in such a way that during the winding the said reinforcing layer becomes a constituent part of the pipe sleeve produced as a result (C5/L55-70). Blau discloses that the reinforcing layer is added to the trailing end of the nonwoven web (C5/L55-65).

Baldwin-Ehret-Hill Inc. and Blau et al. are analogous art because they both teach about processes of producing pipe sleeves comprising winding up nonwoven webs and reinforcing layers on a winding mandrel of a winder. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to add the reinforcing layer to the trailing end of the nonwoven web as described by Blau et al. in the process of Baldwin-Ehret-Hill Inc. Doing so would amount to nothing more than a use of a known method step for its intended use in a known environment to accomplish entirely expected result.

14. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baldwin-Ehret-Hill Inc. (GB 1214330), as applied to claim 9 above, in view of Hartranft et al. (US 5,457,136).

Regarding claim 17, Baldwin-Ehret-Hill Inc. discloses all of the claim limitations as discloses above. Baldwin-Ehret-Hill Inc. does not disclose that the reinforcing layer is treated with a biocide agent. Hartranft et al. discloses a pipe sleeve (C2/L45-5) comprising a reinforcing layer (C3/L65-67) that is treated with a biocide to impart bacterial or fungal resistance to the sleeve (C8/L1-10).

Baldwin-Ehret-Hill Inc. and Hartranft et al. are analogous art because they both teach about pipe sleeves comprising reinforcing layers. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to add biocide to the reinforcing layer as taught by Hartranft et al. in the pipe sleeve of Baldwin-Ehret-Hill Inc. to provide a pipe sleeve that is resistant to bacteria or fungi.

***Conclusion***

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES YAGER whose telephone number is (571)270-3880. The examiner can normally be reached on Mon - Thurs, 7:30am-5pm, EST, Alt. Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Basia Ridley can be reached on 571 272-1453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JY 4/24/08

/Basia Ridley/  
Supervisory Patent Examiner, Art Unit 4145